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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,126	02/27/2004	Takuya Sato	24942SUS8	4679

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

SMITH, SHEILA B

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/787,126

Applicant(s)

SATO ET AL.

Examiner

Sheila B. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-28-03</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Roxbergh ( U.S. Patent Number 6,553,016).

***Regarding claim 1***, Roxbergh discloses essentially all the claimed invention as set fourth in the instant application, further Roxbergh discloses downlink power control at soft handover. In addition Roxbergh discloses a mobile communication system having a plurality of base stations (BS) and a radio controller (RNC) configured to control each of the base stations, wherein, each of the base stations comprises a transmission power notifying unit which notifies the radio controller of downlink transmission power to mobile stations (which reads on column 5 lines 19-21); the radio controller comprises a cell determination unit which determines one of a plurality of cells having good communications quality among the cells provided by each of the base stations (which reads on column 5 lines 1-15); a reference power ratio decision unit which decides a reference power ratio based on the ratio of the downlink transmission power to maximum transmission power of the base station providing the determined cell (which reads on column 5 lines 9-41); a reference power ratio notifying unit which notifies each of the base stations of the decided reference power ratio (which reads on column 5 lines 28-31); and each of

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the base stations further comprises a transmission power controller which controls the downlink transmission power so that the ratio of the base station downlink transmission power to its maximum transmission power to mobile stations approaches the reference power ratio (which reads on column 6 lines 5-41 and exhibited in figure 4).

**Regarding claim 2**, Roxbergh discloses essentially all the claimed invention as set fourth in the instant application, further Roxbergh discloses downlink power control at soft handover. In addition Roxbergh discloses a radio controller for controlling a plurality of base stations in a radio communication system, comprising: a transmission power acquiring unit which acquires the downlink transmission powers from the base stations to mobile stations , which are provided by each of the base stations (which reads on column 5 lines 1-15); a cell determination unit which determines one of a plurality of cells having good communications quality among the cells provided by each of the base stations (which reads on column 5 lines 1-15); a reference power ratio decision unit which decides a reference power ratio based on the ratio of the downlink transmission power to maximum transmission power of the base station providing the determined cell (which reads on column 5 lines 9-41); a reference power ratio notifying unit which notifies each of the base stations of the decided reference power ratio (which reads on column 5 lines 28-31).

**Regarding claim 3**, Roxbergh discloses everything as applied above, additionally Roxbergh discloses a communications quality is an uplink communications quality from the mobile stations to the base stations (which reads on column 6 lines 5-41 and exhibited in figure 4).

**Regarding claim 4**, Roxbergh discloses everything as applied above, additionally Roxbergh discloses an uplink communications quality measuring unit which measures the uplink communications qualities (which reads on column 6 lines 5-41 and exhibited in figure 4).

**Regarding claim 5**, Roxbergh discloses everything as applied above, additionally Roxbergh discloses a communications quality is a downlink communications quality to the mobile stations (which reads on column 6 lines 5-41 and exhibited in figure 4).

**Regarding claim 6**, Roxbergh discloses everything as applied above, additionally Roxbergh discloses a maximum transmission power administrator which administrates the downlink maximum transmission power of each of the bases stations (which reads on column 6 lines 5-41 and exhibited in figure 4).

**Regarding claim 7**, Roxbergh discloses essentially all the claimed invention as set fourth in the instant application, further Roxbergh discloses downlink power control at soft handover. In addition Roxbergh discloses base station establishing a radio communication system together with other base stations and a radio controller which controls each of the base stations, comprising: a transmission power notifying unit which notifies the radio controller of downlink transmission power to mobile stations (which reads on column 5 lines 19-21); a reference power ratio acquiring unit which acquires a reference power ratio provided by the radio controller, the reference power ratio being decided based on the ratio of the downlink transmission power to maximum transmission power of one of the base stations providing a cell having good communications quality (which reads on column 5 lines 1-15); and a transmission power controller which controls the downlink transmission power so that the ratio of the base station

downlink transmission power to its maximum transmission power to mobile stations approaches the reference power ratio (which reads on column 6 lines 5-41 and exhibited in figure 4).

**Regarding claim 8**, Roxbergh discloses everything as applied above, additionally Roxbergh discloses a downlink communication quality acquiring unit which acquires downlink communications quality levels provided by the mobile stations; and a downlink communication quality notifying unit which notifies the radio controller of the downlink communication quality levels (which reads on column 6 lines 5-41 and exhibited in figure 4).

**Regarding claim 9**, Roxbergh discloses essentially all the claimed invention as set fourth in the instant application, further Roxbergh discloses downlink power control at soft handover. In addition Roxbergh discloses transmission power controlling method in a mobile communication system having a plurality of base stations and a radio controller configured to control each of the base stations, comprising the steps of: notifying, by each of the base stations, the radio controller of downlink transmission power to mobile stations (which reads on column 5 lines 19-21); determining, by the radio controller, one of a plurality of cells having good communications quality among the cells provided by each of the base stations (which reads on column 5 lines 1-15); deciding, by the radio controller, a reference power ratio based on the ratio of the downlink transmission power to maximum transmission power of the base station providing the determined cell (which reads on column 5 lines 9-41); notifying, by the radio controller, each of the base stations of the decided reference power ratio (which reads on column 5 lines 28-31); and controlling, by each of the base stations, the downlink transmission power so that the ratio of the base station downlink transmission power to its maximum transmission

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power to mobile stations approaches the reference power ratio (which reads on column 6 lines 5-41 and exhibited in figure 4).

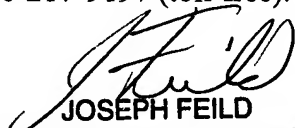
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (571)272-7847. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Smith   
October 3, 2005

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER